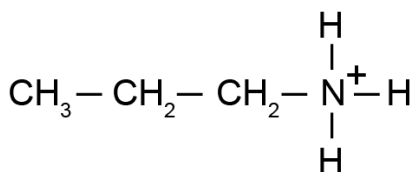
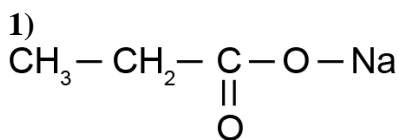


## ANSWERS: Acid Base reactions



When propanoic acid reacts with sodium carbonate, an acid-base reaction occurs in which sodium propanoate, water and carbon dioxide are formed. It is acid-base because the propanoic acid donates a proton, forming the propanoate ion.

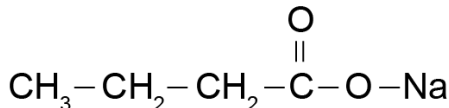
When propanamine reacts with HCl or H<sub>2</sub>SO<sub>4</sub>, acid-base reactions occur. Amines are bases and as a result amines accept protons from acids. In these two reactions both sulfuric acid and hydrochloric acid donate protons to the amine to form organic salts.

2) i) Acid-base / neutralisation

ii) CO<sub>2</sub> gas is a product of the reaction and so bubbles of gas are given off.

iii) CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>COONa

3)



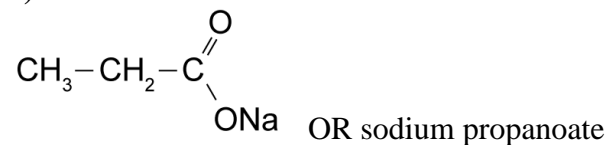
Acid-base – because the carboxylic acid reacts with the base NaOH, or a salt and water is formed.

4) CH<sub>3</sub>–COOK or CH<sub>3</sub>–COO<sup>–</sup>K<sup>+</sup>

Acid-base

5) CH<sub>3</sub>COONa or CH<sub>3</sub>COO<sup>–</sup>

6)



acid-base